

AN ORDINANCE

BY TRANSPORTATION COMMITTEE

02-0-1389

AN ORDINANCE AMENDING THE 2002 (AIRPORT REVENUE FUND) BUDGET BY TRANSFERRING TO AND FROM APPROPRIATIONS IN THE AMOUNT OF \$1,150,000.00 TO PROVIDE ADEQUATE FUNDING FOR THE REPLACEMENT OF APPROXIMATELY 3,600 RUNWAY AND TAXIWAY GUIDANCE LEGEND PANELS.

WHEREAS, the City of Atlanta owns and operates Hartsfield Atlanta International Airport; and

WHEREAS, the Federal Aviation Administration (FAA) has established criteria and specifications (USDOT/FAA AC NO: 150/5345-44e and USDOT/FAA AC NO: 150/5340-18C) for Airport Runway and Taxiway Guidance Signs; and

WHEREAS, numerous existing Runway and Taxiway Guidance Signs at the Hartsfield Atlanta International Airport do not meet the said FAA criteria and specifications due to changes in the color of the legend element and or are in violation of new spacing requirements; and

WHEREAS, failure to comply with the new FAA criteria and specifications will adversely effect the Airport's certification status; and

WHEREAS, it is now necessary to amend the 2002 Airport Revenue Fund Budget to adequately fund the replacement of approximately 3,600 Runway and Taxiway Guidance Legend Panels to comply with FAA specifications.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF ATLANTA, GEORGIA, HEREBY ORDAINS as follows:

Section 1: That the 2002 Airport Revenue Fund Budget be and hereby is amended as follows:

TRANSFER FROM APPROPRIATION

2H01 791001 T11001	Reserve for Appropriations	\$1,150,000.00
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TRANSFER TO APPROPRIATION

2H01 774001 R42001	Facilities other than Buildings	\$1,150,000.00
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Section 2: That all ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed.

A true copy,

Rhonda Daughin Johnson
Municipal Clerk, CMC

ADOPTED by the Council
APPROVED by the Mayor

SEP 16, 2002
SEP 24, 2002

Aviation Lighting Sales, Inc.
P. O. Box 2771
Norcross, Georgia 30091
770-263-7347
Fax 770-449-9749

Standard Signs Parts List

Catalog #	Description	Price
Structural Parts for Signs		
340 & 345	Turn Fastener	\$ 7.37 ea.
240	Turn Fastener Receptacle	\$.91 ea.
LCLT-2	Cover, L	\$ 62.32 ea.
LCLT-2 Spec.	Performance Cover, L	\$ 88.42 ea.
	Adapter Kit- End Casting Extensions	\$ 90.53 ea.
LCLT-3	Base, L	\$ 149.97 ea.
LCLT-4	End Panel, L	\$ 138.78 ea.
LCLT-5*RP	Reflective Legend Face Panel, L	\$ 309.25 ea.
	• Replace * with Y for black letters on yellow	
	• Replace * with L for yellow letters on black	
	• Replace * with R for white numbers on red	
	• Replace * with D for white numbers on black	
LCLT-5AP	Blank Face Panel, L	\$ 124.06 ea.
LCLT-6	Tree, L	\$ 120.34 ea.
L7-A*	Tree Channel (Track), L	\$ 32.79 ea.
	Replace * with color: yellow, black, or red	
L8-A	Light Bar, L	\$ 36.40 ea.
130	Slipfitter	\$ 14.53 ea.
1403/5	Frangible Coupling, L	\$ 19.69 ea.
15	Floor Flange (2-Hole Rectangular)	\$ 21.99 ea.
CLT-19	Tether	\$ 19.73 ea.
Structural and Electrical Parts for Distance Markers		
DCLT-1	Legs	\$ 40.43 ea.
DCLT-1A	Leg Caps	\$ 1.88 ea.
DCLT-2	Top/Bottom Channel	\$ 75.31 ea.
DCLT-3	End Panel	\$ 207.01 ea.
DCLT-3A	Access Door	\$ 7.48 ea.
DCLT-4	U-Bolt with Nuts and Washers	\$ 9.82 ea.
DCLT-8	Light Bar Channel	\$ 27.04 ea.
2" AL Coupling	2" Pipe Coupling	\$ 10.98 ea.
140A	Frangible Coupling - 2600 Ft/Lbs	\$ 23.01 ea.
140AX	Frangible Coupling - Bottom Thread Only	\$ 24.64 ea.
140-3-12ATL-SPEC	12" Frangible Coupling	\$ 32.25 ea.
2234G	Floor Flange (Galv. Steel, Circular, 4-hole)	\$ 21.53 ea.
D-15	Face Panel	\$ 300.98 ea.
D-15A	Race Panel - Barrier Engagement	\$ 300.98 ea.
45W Quartz	45W Exm Quartz Lamp	\$ 18.96 ea.
501	Quartz Socket	\$ 6.14 ea.

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Catalog #	Description	Price
Structural Parts for Signs		
LCLT	Add On Module	\$625.00
LCLT	One Module Base Extension	\$1395.00
LCLT	Panel Installation	\$ 90.00
LCLT	Cover Installation	\$ 75.00

86. Paragraph 19b(2) and b(3) of AC 150/5340-1G, Standards for Airport Markings, are confusing as to when a taxiway centerline should be extended onto a runway and when it may be painted over the runway markings. Would you please provide clarification on these matters?

Paragraph 19b(2) addresses the centerlines for taxiways that are used as entrances or exits for the runway. The centerline becomes a lead-in or lead-off line and may cross over all runway markings with the exception of the designation marking. In the previous version of the AC (150/5340-1F), the standards specifically stated that for taxiways located at the runway end, the taxiway centerline ended at the runway edge, i.e., lead-in and lead-off lines were not installed for these taxiways unless there was a displaced threshold. These standards for lead-in and lead-off lines at the runway ends were inadvertently omitted from the 150/5340-1G version and will be incorporated when a change is issued.

Paragraph 19b(3) addresses taxiway centerlines where a taxiing route crosses the runway. In these cases the taxiway centerline may continue across the runway but is interrupted by any runway markings with one exception. The exception applies to taxiing routes that have been approved for Category III operations. In this case the taxiway centerline continues across all runway markings with the exception of the runway designation marking.

87. Can surface painted location signs be painted on runways?

Paragraph 24 and 25 in AC 150/5340-1G, Standards for Airport Markings, specifically say that holding position signs and the taxiway direction signs should not be painted on runways.

Surface painted location signs, like the painted holding position signs and the taxiway direction signs, should not be painted on runways. The AC will be changed to add a similar sentence to paragraph 26 as found in paragraphs 24 and 25.

88. Paragraph 35a of AC 150/5340-1G, Standards for Airport Markings, does not provide specific information on where the crosses at each runway end should be placed to indicate a temporary closure. The previous edition, AC 150/5340-1F, specifically stated that the crosses should be placed on top of the runway designation markings. Is this still the case?

The crosses should still be placed on top of the runway designation markings. Paragraph 35a will be modified accordingly.

89. Paragraph 35b of AC 150/5340-1G, Standards for Airport Markings, says that when a lighted cross is used to provide a visual means of identifying a closed runway, that the cross be placed within 250 feet of the end of the runway. Does this refer to on pavement only?

While in most cases the raised lighted cross will be located on the runway, there may be times when it is necessary to place the cross off the pavement in the safety area on the extended runway centerline. This is permissible provided that it is located no farther than 250 feet from the end of the runway.

90. Can replacement sign panels for lighted signs be ordered from a manufacturer who is not the original manufacturer of the sign fixture?

For signs qualified under AC 150/5345-44D, Specification for Runway and Taxiway Signs, it is recommended that the original manufacturer provide the sign panels. Installation of panels by another manufacturer may have an effect on the environmental characteristics of the sign. Panels of a different manufacturer may be installed only if the manufacturer provides a certification that the sign will continue to meet the specifications in AC 150/5345-44D. New lighted signs qualified under AC 150/4345-44E and -44F must meet luminaire requirements. Replacement panels for these signs should only be provided by the original manufacturer in order to ensure continued compliance with the environmental and photometric requirements. (AC 150/5345-44F was signed last week by AAS-1 and includes specifications for retroreflective signs. This AC should be available within the next several weeks.)

91. Are airports at which ATC conducts land and hold short operations currently, required to have appropriate signs and markings at this time?

There has been much confusion regarding the requirements for installation of holding position markings and signs on runways to support land and hold short operations. At the time AC 150/5340-18C, Standards for Airport Signs, was issued in July 1991, we anticipated that Air Traffic would shortly be publishing standards for land hold short operations. To anticipate this, we put out guidance requiring holding position markings to be installed no later than Oct. 1, 1992.

Because of internal issues that arose, the Air Traffic Order has not yet been approved. This order is now being coordinated before final approval. Copies have been sent to each regional Airports division for comments. As written, it will require agreement between the airport operator and the ATC manager on the number and location of hold short markings and will establish deadline dates after which hold short operations must be terminated if the appropriate signs, markings and lights are not in place. Until this order is approved and the individual agreements consummated, there is no longer any reason to "quote airport operators for not having markings and signs in place. We should, however, continue to encourage the airport operators to coordinate with the local AT manager and to take the necessary steps to install the required signs and markings as soon as possible.

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SIGNS AND MARKING SUPPLEMENT #12
April 1, 1994

92. There have been several instances when a taxiway or a portion of a taxiway has been used as a runway during daylight hours and in visual meteorological conditions (VMC). What are the proper markings and signing in this type of situation?

There are several things which must be considered here to achieve the proper markings and signing. Basically, a piece of pavement can not be marked as both a taxiway and a runway at the same time - that is, it can not have a yellow centerline and white designation numbers. (NOTE: On airports subject to National Environmental Policy Act requirements, a proposal to use a taxiway as a runway should include a review of the environmental consequences of such an action.)

1. If the pavement is to be used as a runway during the day, it should be painted, as a minimum, with visual runway markings, i.e., white designation numbers and a white centerline. Further, if it used as a runway at night and is to be lighted, it is to have white edge lights.

The office of:
RODNEY D. LONG
AVIATION LIGHTING SUPERVISOR
HARTSFIELD ATLANTA INTERNATIONAL AIRPORT

MEMORANDUM

TO: MS. PAM ROBINSON

FROM: RODNEY D. LONG

DATE: NOVEMBER 8, *R. D. L.* 2002

SUBJECT: SOLE SOURCE JUSTIFICATION FOR AIRPORT ELECTRICAL EQUIPMENT REPLACEMENT OR REPAIR PARTS

Pam.. per our conversation of today, here is the information which you requested.

All items of airport lighting equipment which are used at this, or any other PAR 139 airport, **MUST** have FAA certification. Prior to any item being certified, there are certain criteria which must be met, or exceeded, for each type of equipment or system. Each piece of equipment or system is tested and inspected by the FAA and approval, when granted, is based on equipment or systems being maintained exactly as the manufacturer produced it. Any variation from this maintenance violates the FAA certification of the item and renders it technically unapproved and, thereby, unsuitable for use. This includes replacement parts for light fixtures, runway and taxiway guidance signs, constant current regulators, selector switches, generators, and all other items which require FAA approvals. Although in some instances it is possible to purchase replacement parts which were approved for use in similar FAA approved equipment, from other than original manufacturer/producer approved vendors, which will function in place of the approved equipment, we do in fact lose our FAA certification and, therefore, the CITY OF ATLANTA assume ALL RESPONSIBILITY AND LIABILITIES for its performance, or lack thereof with no FAA backing in the event of catastrophic failure.

The items of electrical equipment purchased through Aviation Lighting Sales are necessary for the approved maintenance of certain of the electrical items in use here at HAIA including our runway and taxiway guidance signs. Each manufacturer has an individual approach to meeting the FAA specifications for products which are approved under a specific specification number. Therefore, each manufacturer's products are unique in design and components but perform the same effective function. It is not, however, possible to interchange equipment or internal parts without a corresponding

alteration of the function of the equipment. The electrical equipment in use here at HAIA was developed by several different manufacturers. Since it is against City of Atlanta policy, as well as FAA regulations, to specify a particular manufacturer's product during a construction project, it becomes necessary to purchase repair/replacement parts from all of the various manufacturers who's products have been furnished by successful bidders. Although there are several other manufactures who could make replacement parts for some of our existing electrical items; runway and taxiway guidance signs are a notable exception. Use of other than OEM parts would cause HAIA to potentially loose our FAA certification, and face the potential of uncertain functional reliability or even unexpected functional failures. This would certainly place the City of Atlanta in the position of total liability. If there is a desire to use equipment other than that developed by the existing manufacturers, that will be totally acceptable. There are several replacement products available on the market which will perform these functions. In order to meet FAA requirements however, the product of a different manufacturer will need to be purchased and installed and the existing equipment removed. This is an expensive but achievable alternative.

Pam, you and I were discussing specifically the runway and taxiway guidance signs in service on HAIA. There are, in fact, several FAA approved manufactures of runway and taxiway guidance signs. All of the approved signs meet the FAA certification requirements for sign legend sizes, light output, character description, color and reflectivity. No two signs, of different manufacturers, bear any physical resemblance otherwise. Each manufacturer developed it's own method of meeting the optical requirements. In order to maintain the mandated signs on our facility we have but two choices. We can purchase all repair and replacement parts for the signs from the original manufacturer, thereby maintaining our FAA certification, or replace the signs completely with the product of another manufacturer. I assure you that the utilization of OEM repair and replacement parts is far less costly than a total sign replacement program would be.

I hope that this gives you the information which you express a desire for. I also hope that it is presented in a way that is clear to you and your staff while you are involved with these very important consideration. If you have further questions, please feel free to ask me.

cc: Larry Kirkus
File

**Hartsfield Atlanta
International Airport**



CITY OF ATLANTA
BUREAU OF PURCHASING


October 10, 2002

2002 OCT 11 11 01 06

Shirley Franklin
Mayor

Benjamin R. DeCosta
Aviation General Manager

TO: Felicia Strong-Whitaker, Purchasing Agent
Bureau of Purchasing and Real Estate

FROM:  Carole Dortch, Assistant General Manager, Administration
Department of Aviation

SUBJECT: Aviation Lighting Sales Standard Sign Company – Sole Source
Request – Requisition # R4202972

FAA requires that sign legend panels have a life expectancy of three (3) years before the retro-reflective materials required for the legend message changes color to an unacceptable degree due to the constant exposure to sunlight. The existing sign legend panels have been in place since 1990 and we are experiencing an excessive degree of discoloration. In order to remain compliant with FAA requirements, we must replace the existing legend panels to restore the signs to their proper color.

All items of airport lighting equipment, which are used at Hartsfield, or any other PAR 39 airport, **MUST** have FAA certification. Prior to any item being certified, there are designated criteria, which must be met, or exceeded, for each type of equipment or system. Each piece of equipment or system is tested and inspected by the FAA and approval, when granted, is based on equipment or systems being maintained exactly as the manufacturer produced it. Any variation from this maintenance, violates the FAA certification of the item and renders it technically unapproved and, thereby, unsuitable for use. This includes replacement parts for light fixtures, runway and taxiway guidance signs, constant current regulators, generators and control and monitoring systems. DOA can purchase parts intended for similar FAA approved equipment from other than original manufacturer/producer approved vendors, which will function in place of the approved equipment, but this will cause loss of FAA certification, making the **CITY OF ATLANTA, RESPONSIBLE AND LIABLE** for its performance, or lack thereof with no FAA backing in the event of catastrophic failure.

The Runway and Taxiway Guidance Signs which are currently in operation at Hartsfield Atlanta International Airport must be brought into compliance with current FAA Specification requirements. This will require the replacement of all existing retro-reflective legend panels. In addition, specification requirements, which have been adopted since the installation of the existing signs was accomplished, required a different spacing for certain types of legend messages. The additional spacing requirement will require the installation of additional sign modules on approximately 100 of our 550



existing sign locations. This addition will require the extension of the existing 2' wide 6" deep concrete base, and retrofitting the effected signs to the required length by adding an additional module, complete with a new isolation transformer, internal sign wiring changes and L-867 light bases where required to facilitate some new longer length signs.

The original sign manufacturer must supply all sign parts and legend panels in order to maintain FAA certification approvals. The Manufacturer is "STANDARD SIGNS, INC," of Cleveland, Ohio. The local distributor for this company is **Aviation Lighting Sales of Atlanta, Georgia**, therefore, DOA is requesting a Sole Source Blanket Order be issued to Aviation Lighting Sales in an amount not to exceed \$1,150,000.00, for a period of one year.

Sign additions and legend panels must comply with the attached original sign specifications in order to maintain FAA certification.

Requisition number **R4202972** is also attached.

If additional information is required, please contact DOA Contract Services Division at 404-209-3170, ext. 131.

Attachments

xc: P. Robinson
M. Eady
J. Stogner
R. Long
File

~~404-530-5500~~
Rodney Long - 4-530-6488
ext 135

SIGN SPECIFICATIONS

CONSTRUCTION AND DESIGN

Signs shall have a modular construction; 1, 2, and 3 module signs must be designed so that they can be extended with additional modules to ensure flexibility in displaying legends of varying lengths. Sign tops shall be secured with a maximum of two turn fasteners and be removable without tools for easy maintenance. Sign faces shall be curved in shape and made of acrylic plastic; sign face panels must not exceed 42" in length to ensure easy removal and replacement by one individual.

TRADITIONAL LIGHTING SYSTEMS

Signs shall use an electrical system proven reliable in the airfield lighting environment for at least 10 years. Signs must use brightness control transformers with taps to facilitate lamp adjustment. In order to keep systems straightforward and easy to maintain, signs shall not contain printed circuit boards or semiconductor devices.

LIGHTING CONTROL SYSTEM

Signs shall use an energy efficient electrical system. All sign sizes and lengths shall have a power factor of .85 or higher. Sign systems must operate on brightness step 5 without internal modification to give the airport maximum flexibility and minimize parts to be stocked.

LUMACURVES ALREADY EXIST ON THE FIELD, therefore:

Airport signs shall be LUMACURVE as manufactured by Standard Signs Inc to be compatible with, and make the best use of existing equipment. Signs must be retrofitted with LUMACURVE add-on modules and replacement face panels to accomplish desired legends.

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE

ATTN: GREGORY PRIDGEON

Commissioner's Signature

Director's Signature

Originating Department: Department of Aviation

Contact Person: Felicia Strong-Whitaker,

Committee(s) of Purview: Transportation

Council Deadline: November 15, 2002

Committee Meeting Dates(s): November 27, 2002

Full Council Date: December 2, 2002

CAPTION

AUTHORIZING THE MAYOR TO ENTER INTO AN APPROPRIATE CONTRACTUAL AGREEMENT WITH AVIATION LIGHTING SALES, INC. FOR THE REPLACEMENT OF ALL EXISITING RUNWAY AND TAXIWAY GUIDANCE SIGNS LEGEND PANELS ON BEHALF OF THE DEPARTMENT OF AVIATION, IN AN AMOUNT NOT TO EXCEED \$1,150,000.00. ALL CONTRACTED WORK SHALL BE CHARGED TO AND PAID FROM FUND ACCOUNT AND CENTER NUMBERS: 2H01 574001 R42001.

BACKGROUND

FINANCIAL IMPACT (if any)

Mayor's Staff Only

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Received by Mayor's Office:

11/14/02
(date)

Reviewed by:

(initials) (date)

Submitted to Council:

(date)

Action by Committee:

____ Approved ____ Advertised ____ Held ____ Amended
____ Substitute ____ Referred ____ Other